



CITY COUNCIL AGENDA STATEMENT



MAY 1, 2007, Item_____

ITEM TITLE: RESOLUTION ACCEPTING THE 2005 GREENHOUSE GAS EMISSIONS INVENTORY AND DIRECTING STAFF TO RECONVENE A CLIMATE CHANGE WORKING GROUP

SUBMITTED BY: DIRECTOR OF CONSERVATION & ENVIRONMENTAL SERVICES ENVIRONMENTAL RESOURCE MANAGER

REVIEWED BY: INTERIM CITY MANAGER

4/5THS VOTE: YES ☐ NO ☒

Since the early 1990s, Chula Vista has been addressing climate change through its involvement with ICLEI – the International Council for Local Environmental Initiatives – and the City’s Carbon Dioxide Reduction Plan. The 2005 Greenhouse Gas (GHG) Emissions Inventory is the first formal evaluation of the City’s progress in reaching its emissions goal of 80% of 1990 levels by 2010. The 2005 inventory indicates that Chula Vista’s annual citywide GHG levels have increased by 35% since 1990 due primarily to residential growth. While this represents a significant challenge in reaching the City’s 2010 community emissions goal, the City did make significant progress in reducing annual per capita emissions by 17% between the two inventory years and avoiding nearly 200,000 tons of GHG emissions annually. In addition, GHG emissions from municipal sources decreased by 18% mainly due to energy-efficient traffic signal retrofits. To reach the community and municipal emission reduction targets outlined in the CO₂ Reduction Plan, the City must decrease annual emissions by at least an additional 389,963 and 377 tons, respectively.

BACKGROUND

Since the 1990s, the City of Chula Vista has been engaged in addressing climate change through its Carbon Dioxide (CO₂) Reduction Plan. The Plan, which was created with the assistance of a 24-member Task Force, included a baseline assessment of 1990 greenhouse gas (GHG) emission levels and a list of 20 actions that the City could undertake to help reach its goal of 80% of 1990 emission levels by 2010. To date, eighteen of the Plan’s measures have been implemented by various City departments.

The 2005 Greenhouse Gas Emissions Inventory is the first formal review of the City’s progress in reducing emissions from both municipal operations and the broader community.

The emissions analysis was performed using the ICLEI Cities for Climate Protection Campaign's protocol which evaluates emissions from three main parameters – energy consumption, transportation, and solid waste. Although there are six GHGs outlined in the Kyoto Protocol, the ICLEI software calculates emissions based on Equivalent CO₂ or eCO₂ which allows emissions of different strengths to be added together. The California Climate Action Registry, the state's voluntary emissions registry, also reviewed and assisted with data collection and synthesis. Because a different protocol was originally used in calculating 1990 levels, the raw data was re-entered using the current ICLEI protocol and software. Although this has modified 1990 emission values, it creates an opportunity to more accurately compare 1990 and 2005 levels and to more effectively gauge the City's progress.

ENVIRONMENTAL REVIEW

The Environmental Review Coordinator has reviewed the proposed activity for compliance with the California Environmental Quality Act (CEQA) and has determined that there is no possibility that the activity may have a significant effect on the environment because the current action is acceptance of the 2005 inventory and reconvening of a Working Group only; therefore, pursuant to Section 15061(b)(3) of the State CEQA Guidelines the activity is not subject to CEQA. Thus, no environmental review is necessary.

RECOMMENDATION

Staff recommends that City Council accept the 2005 Greenhouse Gas Emissions Inventory and direct staff to reconvene a Climate Change Working Group to assist in developing recommendations for future emissions reduction options and priorities for Council's review and consideration.

BOARDS/COMMISSION RECOMMENDATION

Although no formal commission recommendation is required, staff did present the report to the Resource Conservation Commission on April 16, 2007 as an Information Item.

DISCUSSION

In 2005, Chula Vista's total community GHG emissions were 960,639 tons eCO₂ representing a 35% increase compared to 1990 levels. Transportation emissions remained the single largest source (approximately 48%) of citywide GHG emissions based on annualized Vehicle Miles Traveled. Emissions from residential electricity and natural gas use represented almost one-third of community emissions. Conversely, community GHG emission levels declined on a per capita, household and acre basis between the two inventory years.

Although municipal emissions only represent about 2% of Chula Vista's total community GHG levels, emissions from municipal operations and facilities in 2005 equaled 19,432 tons eCO₂ representing an 18% reduction since 1990. The main factor for this overall reduction was the City's retrofit of traffic and pedestrian signals with energy-efficient technology. Conversely, fuel use and building energy use, and their corresponding GHG emissions, approximately doubled between the two inventory years. Although the number

of City employees (FTP) increased approximately 38% since 1990, per employee emission levels decreased 41% to 16.2 tons eCO₂.

The 2005 Greenhouse Gas Emissions Inventory has enabled Chula Vista to assess its progress in reducing GHG emissions. For municipal operations and facilities, the measures implemented from the CO₂ Reduction Plan have clearly helped the City decrease emission levels. To reach its 20% reduction target by 2010, at least an additional 377 tons must be offset. These reductions may be possible from a number of current efforts. The City's Energy Efficiency Partnership with San Diego Gas & Electric is providing staff support and funding for additional retrofit projects in various facilities. In addition, ongoing Civic Center renovations will eventually replace older buildings with newer, energy-saving structures. Finally, municipal fleets can continue to be replaced by more fuel-efficient and alternative fuel vehicles.

At the community level, carbon-reducing measures implemented over the last 15 years have lowered emission rates on a per capita, household and acre basis. However, these accomplishments could not offset the increased cumulative emissions caused by the City's tremendous growth during this time period. Since the baseline inventory, the City has grown by over 82,000 residents and 23,000 homes. To reach its reduction target by 2010, the City is now tasked with decreasing annual community emissions by at least 389,963 tons or 60%.

Although this may seem daunting, there are new regional and state efforts which could contribute to the City's ability to meet its GHG goals. The California Renewables Portfolio Standard program, established through Senate Bill 1078, will require California utilities to obtain 20% of their power from renewable sources by 2010. Similarly, the new California Solar Initiative will provide funding to encourage residents and businesses to install photovoltaic solar systems. Both initiatives will help to reduce energy demand on carbon-emitting power plants and have the potential to directly reduce Chula Vista's GHG emissions. Statewide transportation GHG emissions are also beginning to be addressed through Assembly Bill 1493 which requires the "maximum feasible reduction of greenhouse gases" emitted by passenger cars and light-duty trucks starting in the 2009 vehicle model year. Finally, Assembly Bill 32, the Global Warming Solutions Act of 2006, requires that California's global warming emissions be reduced to 1990 levels by 2020. The reduction will be accomplished through an enforceable statewide cap on "significant GHG emitters" starting in 2012. Although AB 32 will be implemented after the City's reduction deadline, the new law has already begun to encourage public and private sectors to lower their emissions. These statewide GHG initiatives represent timely opportunities that the City can capitalize on to advance its GHG reduction goals at the least cost to the City and local consumers.

There are also pending local actions which will contribute to the City's emissions reductions. New mixed-use development projects proposed through the Urban Core Specific Plan and the Eastern Urban Center will likely dampen residents' dependency on motorized vehicles. Future extension of the regional light rail or Bus Rapid Transit (BRT) system into eastern Chula Vista will further encourage mass transit use.

Over the last 15 years, the City of Chula Vista has made considerable progress in reducing GHG emissions from municipal and community-wide sources. However, the City's continued growth requires it to reassess its reduction efforts and to focus its strategy on new opportunities if it is going to meet its climate change commitment. As a first strategy, staff recommends that City Council accept the 2005 Greenhouse Gas Emissions Inventory and direct staff to reconvene a Climate Change Working Group. The Working Group would be comprised of resident, business, community group and academic representatives. The Climate Change Working Group would initially serve, through an open, transparent and inclusive process, to advise staff on creating a list of options and recommendations that the City could pursue to attain its 2010 GHG reduction goals. Staff would then return to Council to present these recommendations for review and consideration and seek funding support, if necessary.

DECISION MAKER CONFLICT

Staff has reviewed the decision contemplated by this action and has determined that it is not site specific and consequently the 500 foot rule found in California Code of Regulations section 18704.2(a)(1) is not applicable to this decision.

FISCAL IMPACT

Approval of the resolution would not require any additional appropriations from City Council. Staff would return to Council before the end of the year with a Working Group Report outlining their recommendations for future emissions reduction options and priorities. Staff's report will include a budget with potential funding sources that allows Council the ability to compare the cost and benefit of the Working Group recommendations.

ATTACHMENTS

2005 Greenhouse Gas Emissions Inventory
DRAFT Climate Change Working Group Framework

Note: The Carbon Dioxide (CO₂) Reduction Plan can be found at the following website:
<http://www.chulavistaca.gov/goto/co2/>)

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